#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: K. C. Indukumar et al.

Art Unit : Unknown

Examiner: Unknown

Serial No.:

: Herewith

Filed Title

: A DATA PROCESSING APPARATUS AND METHOD FOR D=2 OPTICAL

**CHANNELS** 

#### **BOX PATENT APPLICATION**

Commissioner for Patents Washington, D.C. 20231

### PRELIMINARY AMENDMENT

Prior to examination, please amend the application as follows:

## In the claims:

Amend claims 4, 5, 6, and 15 as follows:

- 4. (Amended) A data processing apparatus as claimed in claim 2, wherein the set of data correction rules is selectively applied at a plurality of data-bit locations associated with said portion.
- 5. (Amended) A data processing apparatus as claimed in claim 2, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.
- 6. (Amended) A data processing apparatus as claimed in claim 2, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

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15. (Amended) A method as claimed in claim 12, further comprising identifying error events and devising correction rules to correct errors at predetermined data-bit locations associated with the detected data distribution.

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Add claims 19-30:

--19. A data processing apparatus as claimed in claim 3, wherein the set of data correction rules is selectively applied at a plurality of data-bit locations associated with said portion.

- 20. A data processing apparatus as claimed in claim 3, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.
- 21. A data processing apparatus as claimed in claim 4, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.
- 22. A data processing apparatus as claimed in claim 19, wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.
- 23. A data processing apparatus as claimed in claim 3, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.
- 24. A data processing apparatus as claimed in claim 4, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.

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25. A data processing apparatus as claimed in claim 5, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data

distribution.

26. A data processing apparatus as claimed in claim 6, wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data

distribution.

27. A data processing apparatus as claimed in claim 19, wherein the data corrections are

effected additionally in dependence upon the combination of bit-polarities of the detected data

distribution.

28. A data processing apparatus as claimed in claim 20, wherein the data corrections are

effected additionally in dependence upon the combination of bit-polarities of the detected data

distribution.

29. A data processing apparatus as claimed in claim 21, wherein the data corrections are

effected additionally in dependence upon the combination of bit-polarities of the detected data

distribution.

30. A data processing apparatus as claimed in claim 22, wherein the data corrections are

effected additionally in dependence upon the combination of bit-polarities of the detected data

distribution.--

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# Version with markings to show changes made

## In the claims:

Claims 4, 5, 6, and 15 have been amended as follows:

- 4. (Amended) A data processing apparatus as claimed in claim 2 [or 3], wherein the set of data correction rules is selectively applied at a plurality of data-bit locations associated with said portion.
- 5. (Amended) A data processing apparatus as claimed in <u>claim 2</u> [any of claims 2 to 4], wherein the data corrections are effected in a manner which takes account of amplitude variations in the signal representation of the recorded data and the detected data.
- 6. (Amended) A data processing apparatus as claimed in <u>claim 2</u> [any of claims 2 to 4], wherein the data corrections are effected additionally in dependence upon the combination of bit-polarities of the detected data distribution.
- 15. (Amended) A method as claimed in <u>claim 12</u> [any of claims 12 to 14], further comprising identifying error events and devising correction rules to correct errors at predetermined data-bit locations associated with the detected data distribution.

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### REMARKS

Applicants have amended claims 4-6 and 15, and have added claims 19-30. No new matter has been introduced. More specifically, new claim 19 is a subset of original claim 4; new claims 20-22 are each subsets of original claim 5; and new claims 23-30 are each subsets of original claim 6.

Attached is a marked-up version of the changes being made by the current amendment.

Applicants request that all claims be examined. Please apply any charges to Deposit Account No. 06-1050.

Respectfully submitted,

8-28-01

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